338.2
Un3m

TATES.

1902.		1903.		PRODUCTS.
QUANTITY.	VALUE.	QUANTITY.	VALUE.	
(c)17,821,307	$372,775,000	(c)18,009,252	$344,350,000	Pig iron.

LIBRARY OF THE UNIVERSITY OF ILLINOIS
338.2
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DEPARTMENT OF THE INTERIOR

UNITED STATES GEOLOGICAL SURVEY

MINERAL PRODUCTS OF THE UNITED STATES.

Calendar Years 1894 to 1903.

PRODUCTS.	1894.		1895.		1896.		1897.		1898.		1899.		1900.		1901.		1902.		1903.		PRODUCTS.
	QUANTITY.	VALUE.	QUANTITY.	VALUE.	QUANTITY.	VALUE.	QUANTITY.	VALUE.	QUANTITY.	VALUE.	QUANTITY.	VALUE.	QUANTITY.	VALUE.	QUANTITY.	VALUE.	QUANTITY.	VALUE.	QUANTITY.	VALUE.	
METALLIC.																					
Pig iron (spot value *a*) long tons (*b*)	(c) 6,657,388	$65,007,247	(c) 9,446,308	$103,198,530	(c) 8,623,127	$90,250,000	(c) 9,652,680	$93,122,299	(c) 11,773,934	$116,557,000	(c) 13,620,703	$245,172,654	(c) 13,789,242	$259,944,000	(c) 15,878,354	$242,274,000	(c) 17,821,307	$372,775,000	(c) 18,009,252	$344,350,000	Pig iron.
Silver, coining value (*d*) troy ounces	49,501,122	64,051,000	55,727,009	72,081,000	58,834,800	76,068,236	53,060,000	68,637,172	54,436,400	70,394,425	54,764,500	70,806,626	57,647,000	74,553,493	58,134,000	[illegible]	[illegible]	[illegible]	54,300,000	70,206,060	Silver.
Gold, coining value (*e*) do.	1,910,816	39,501,000	2,254,760	46,610,000	2,568,132	53,088,000	2,774,935	57,363,000	3,118,490	64,463,000	3,437,210	71,053,400	3,829,897	79,171,000	3,805,500	78,666,000	3,870,000	80,000,000	3,760,000	73,891,700	Gold.
Copper (*f*), value at New York City pounds	364,866,908	33,141,142	385,913,404	38,012,470	460,061,430	49,456,603	494,078,274	54,080,180	526,512,387	61,865,276	568,666,921	101,222,712	606,117,166	90,494,039	602,072,519	87,304,515	659,508,644	76,560,934	698,044,517	91,306,006	Copper.
Lead, value at New York City short tons (*g*)	159,331	9,942,254	170,000	11,220,000	186,000	10,528,000	212,000	14,685,728	222,000	16,650,000	210,500	18,945,000	270,824	23,961,688	270,700	23,280,200	270,000	22,140,000	260,000	23,530,000	Lead.
Zinc, value at New York City do.	75,328	5,358,026	99,686	6,276,020	81,499	6,519,920	99,980	8,498,300	115,399	10,385,910	129,051	14,840,865	123,886	10,654,196	140,822	13,765,760	156,927	14,625,596	159,219	16,717,995	Zinc.
Quicksilver, value at San Francisco flasks (*h*)	30,416	924,000	36,104	1,337,131	30,765	1,075,449	26,648	993,445	31,092	1,188,627	30,454	1,452,745	28,317	1,302,586	29,727	1,332,303	34,291	1,467,848	33,620	1,344,934	Quicksilver.
Aluminum, value at Pittsburg pounds	850,000	446,250	920,000	464,600	1,300,000	520,000	4,000,000	1,500,000	5,200,000	1,716,000	6,500,000	1,716,000	7,150,000	1,920,000	7,150,000	2,288,000	7,300,000	2,384,590	7,500,000	2,384,900	Aluminum.
Antimony (*i*), value at San Francisco short tons	1,387	249,706	2,013	304,169	2,478	347,539	3,061	442,300	3,238	532,101	2,861	559,189	4,226	837,896	2,639	539,902	3,561	634,506	3,128	348,433	Antimony.
Nickel (*j*), value at Philadelphia pounds	9,616	3,269	10,302	3,091	17,170	4,464	23,707	7,823	11,145	3,956	22,541	8,566	9,715	3,886	6,700	3,551	3,748	2,701	114,200	45,900	Nickel.
Tin do.	(none.)		(none.)		(none.)		(none.)		(none.)		(none.)		(none.)		(none.)		(none.)		(k)		Tin.
Platinum, value (crude) at San Francisco troy ounces	100	600	150	900	163	944	150	900	225	1,913	300	1,800	400	2,500	1,408	27,326	94	1,814	110	(l) 2,090	Platinum.
Total value of metallic products		$218,392,494		$281,479,931		$287,860,155		$302,531,147		$343,748,268		$525,779,557		$550,425,286		$518,266,253		$642,258,584		$624,318,008	
NONMETALLIC (Spot Values *a*).																					
Fuels:																					
Bituminous coal (*m*) short tons	118,820,405	$107,603,501	135,118,193	$115,749,771	137,640,276	$114,891,515	147,617,519	$119,595,224	166,593,523	$132,608,713	193,323,187	$167,952,104	212,316,112	$220,930,313	223,828,149	$236,422,449	260,216,044	$290,858,483	282,749,348	$351,687,933	Bituminous coal.
Pennsylvania anthracite long tons	46,358,144	78,809,053	51,785,122	82,019,272	48,523,287	81,748,651	46,974,714	79,301,954	47,663,076	75,414,537	53,944,647	88,142,130	51,221,353	85,757,851	60,242,360	112,504,620	36,940,710	76,173,586	66,613,454	132,036,448	Pennsylvania anthracite.
Natural gas		13,954,400		13,006,650		13,002,512		13,826,422		15,296,813		20,074,873		23,698,674		27,067,352		30,867,863		33,815,360	Natural gas.
Petroleum barrels (*n*)	49,344,516	33,532,095	52,892,276	57,632,296	60,960,361	58,518,709	60,475,516	40,874,072	55,364,233	44,193,359	57,070,850	64,603,904	63,620,529	75,989,313	69,389,194	66,417,318	88,766,916	71,170,910	100,461,337	94,634,050	Petroleum.
Structural Materials:																					
Brick clay		9,000,000		9,000,000		9,000,000		8,000,000		9,000,000		11,250,000		12,000,000		13,800,000		15,000,000		13,000,000	Brick clay.
Cement barrels (*o*)	8,362,245	5,020,081	8,731,401	5,482,254	9,513,473	6,473,213	10,989,463	8,178,283	12,111,208	9,859,501	15,520,445	13,889,142	17,331,150	13,283,581	20,068,737	15,786,798	25,753,504	25,366,380	29,899,140	31,931,341	Cement.
Stone (*p*)		36,534,788		33,319,131		30,142,661		34,667,772		36,607,264		44,090,670		44,321,345		55,615,926		64,359,099		67,960,468	Stone.
Abrasive Materials:																					
Corundum and emery short tons	1,495	95,936	2,102	106,256	2,120	113,246	2,165	106,574	4,064	275,064	4,900	150,600	4,305	102,715	4,303	146,049	4,251	104,603	2,542	64,102	Corundum and emery.
Crystalline quartz do.	6,024	18,054	9,000	27,000	6,000	18,000	7,500	22,500	8,012	23,990	13,600	39,000	14,461	40,705	14,030	41,300	15,104	84,335	9,038	76,908	Crystalline quartz.
Garnet for abrasive purposes do.							2,554	80,853	4,067	86,850	2,765	90,325	3,185	123,475	4,444	150,100	3,926	132,820	3,930	132,500	Garnet (abrasive).
Grindstones		233,214		205,768		326,826		368,058		489,769		675,586		710,026		580,703		667,431		721,446	Grindstones.
Infusorial earth and tripoli short tons	2,584	11,718	4,954	20,514	3,846	26,792	3,833	22,833	3,733	16,691	4,334	37,032	3,615	24,207	4,020	32,950	5,665	53,244	9,219	76,273	Infusorial earth and tripoli.
Millstones		13,887		22,542		22,567		25,932		25,934		28,115		32,856		57,179		59,808		52,552	Millstones.
Oilstones, etc		136,873		155,881		127,098		149,970		180,738		206,283		176,087		156,309		221,762		366,057	Oilstones, etc.
Chemical Materials:																					
Arsenious oxide short tons															300	18,000	1,353	81,180	611	36,696	Arsenious oxide.
Borax pounds	14,680,130	774,445	11,918,000	595,900	13,508,000	675,400	16,000,000	1,080,000	16,000,000	1,120,000	40,714,000	1,139,882	1,602	170,036	Refined, short tons 5,344	697,109	Refined, long tons 17,404	2,447,614	Crude, short tons 34,430	661,400	Borax.
Bromine do.	379,444	182,450	517,421	134,343	546,380	144,501	487,149	129,094	456,979	126,614	433,004	108,251	24,235	848,215	Crude, short tons 17,087	314,811	Crude, long tons 2,600	91,000			Bromine.
Fluorspar short tons	7,500	47,500	4,000	24,000	6,500	52,000	5,062	37,159	8,575	63,950	15,900	96,650	18,430	94,500	19,586	213,000	46,016	371,033	521,204	140,472	590,500	167,500	Bromine.
Gypsum do.	239,312	717,919	265,503	807,447	224,129	573,344	268,982	755,864	291,240	755,280	486,235	1,267,080	594,462	1,627,203	633,791	1,506,041	816,478	2,069,361	42,523	213,617	Fluorspar.
Lithium do.													520	43,680	1,750	43,750	1,245	25,750	1,061,704	3,792,043	Gypsum.
Marls do.	75,000	40,000	60,000	30,000	60,000	30,000	60,000	30,000	60,000	30,000	60,000	30,000	60,000	30,000	99,880	136,880	12,439	12,741	1,155	33,425	Lithium.
Phosphate rock long tons	996,949	3,473,647	1,038,551	3,606,094	930,779	2,803,372	1,039,345	2,673,202	1,308,885	3,453,460	1,515,702	5,084,076	1,491,216	5,359,249	1,483,723	5,318,463	1,490,314	4,693,444	34,311	32,521	Marls.
Pyrite do.	103,940	363,194	99,549	322,845	115,483	320,163	143,201	391,541	193,164	593,801	174,734	543,249	204,615	749,991	(q) 241,691	1,257,679					Phosphate rock.
Sulphur short tons	500	20,000	1,800	42,000	5,260	87,200	2,275	45,590	1,200	32,960	4,830	107,500	3,525	88,100			(q) 207,874	947,089	(q) 233,127	1,109,618	Pyrite.
Salt barrels (*r*)	12,967,417	4,738,185	13,669,649	4,423,084	13,850,726	4,040,839	15,973,202	4,920,020	17,612,636	6,212,554	19,708,614	6,867,467	20,869,342	6,944,603	20,566,661	6,617,449	23,649,231	5,668,636	18,960,089	5,206,966	Sulphur.
Pigments:																					Salt.
Barytes (crude) short tons	23,335	86,983	21,529	68,321	17,066	46,513	26,042	58,295	31,706	108,339	41,894	139,528	67,680	188,089	49,070	157,844	61,668	203,154	30,397	152,150	Barytes.
Cobalt oxide pounds	6,763	10,145	14,458	20,675	10,700	15,301	19,520	31,232	6,247	9,371	10,230	18,513	6,471	11,648	13,360	24,048	3,730	6,714	120,000	(s) 228,000	Cobalt oxide.
Mineral paints short tons (*t*)	41,926	498,093	50,695	621,552	48,032	530,455	60,913	795,793	58,850	694,856	63,111	728,389	72,222	881,363	61,460	769,962	73,049	944,333	62,122	646,222	Mineral paints.
Zinc white do.	19,987	1,399,090	20,710	1,449,700	20,000	1,400,000	25,000	1,750,000	33,000	2,310,000	40,146	3,211,680	46,840	3,667,210	46,500	3,720,000	52,645	4,016,499	62,962	4,601,718	Zinc white.
Miscellaneous:																					
Asbestos short tons	325	6,463	795	13,525	504	6,100	380	6,450	603	10,300	681	11,740	1,054	16,310	747	13,446	1,005	16,200	887	16,760	Asbestos.
Asphaltum do.	60,570	353,400	68,163	346,281	80,503	577,563	75,945	664,632	76,337	675,649	75,085	553,904	54,389	415,958	63,134	555,435	105,458	765,046	101,255	1,005,446	Asphaltum.
Bauxite long tons	11,066	35,818	17,069	44,000	18,364	47,338	20,590	57,652	25,149	75,437	35,280	125,598	23,184	89,676	18,905	79,914	29,222	126,206	46,087	171,306	Bauxite.
Chromic iron ore do.	3,680	53,331	1,740	16,795	786	6,667	(none.)	(none.)	(none.)	(none.)	(none.)	(none.)	140	1,400	363	9,790	315	4,567	130	2,350	Chromic iron ore.
Clay (all other than brick) short tons	(u) 403,200	800,000	(u) 403,200	800,000	(u) 403,200	800,000	563,115	978,448	585,450	1,384,766	843,279	1,645,328	1,221,660	1,940,377	1,367,170	2,576,932	1,455,357	2,061,072	1,650,035	2,649,042	Clay (all other than brick).
Feldspar do.	19,264	167,000	8,523	30,000	10,203	35,200	12,516	43,100	13,440	32,395	24,202	211,545	24,821	180,971	34,741	220,422	45,287	250,424	41,891	256,735	Feldspar.
Fibrous talc do.	39,906	435,060	39,240	370,893	46,089	399,443	57,009	396,936	54,356	411,430	54,655	438,150	63,500	499,500	69,200	483,600	71,100	615,350	60,230	421,600	Fibrous talc.
Flint do.	42,560	319,200	13,747	21,038	12,458	24,226	13,466	26,227	21,423	42,670	29,852	180,345	32,495	86,351	34,420	149,297	36,363	144,209	85,233	136,947	Flint.
Fuller's earth do.	(v)		6,900	41,400	9,672	59,360	17,113	112,272	14,860	106,500	12,381	79,644	9,698	67,535	14,112	96,695	11,492	90,144	20,693	190,277	Flint.
Glass sand do.																	943,135	807,797	823,044	855,626	Fuller's earth.
Graphite pounds	918,000	64,010		52,582	Crystalline, lbs. 535,958 Amorphous, tons 760	48,460	Crystalline, lbs. 1,254,402 Amorphous, tons 1,108	54,277	Crystalline, lbs. 2,360,000 Amorphous, tons 990	75,200	Crystalline, lbs. 2,900,732 Amorphous, tons 2,324	167,106	Crystalline, lbs. 5,507,855 Amorphous, tons 611	197,579	Crystalline, lbs. 3,967,612 Amorphous, tons 809	167,714	Crystalline, lbs. 2,936,024 Amorphous, tons 4,739	182,108	Crystalline, lbs. 4,536,155 Amorphous, tons 16,591	225,554	Glass sand.
Limestone for iron flux long tons	3,698,550	1,049,275	5,247,949	2,623,974	4,120,102	2,060,000	4,247,688	2,124,000	5,275,019	2,638,000	6,707,435	4,695,205	7,495,435	3,687,394	8,540,168	4,659,636	12,139,248	5,271,252	12,029,719	5,423,732	Graphite.
Magnesite short tons	1,440	10,240	2,200	17,000	1,500	11,000	1,143	13,671	1,263	19,075	1,280	18,480	2,252	19,333	3,500	10,500	2,830	6,490	3,744	10,595	Limestone for iron flux.
Manganese ore long tons	6,308	53,635	9,547	71,769	10,088	90,727	11,108	95,505	15,937	129,185	9,935	82,278	11,771	100,389	11,995	116,732	7,477	60,911	2,825	25,335	Magnesite.
Mica pounds		52,388		59,631	Sheet, lbs. 63,441 Scrap, tons 1,750	82,676	Sheet, lbs. 80,774 Scrap, tons 740	80,774	Sheet, lbs. 129,520 Scrap, tons 3,399	103,534	Sheet, lbs. 108,570 Scrap, tons 1,503	70,587	Sheet, lbs. 456,283 Scrap, tons 50,878	92,758	Sheet, lbs. 360,060 Scrap, tons 2,171	98,049	Sheet, lbs. 373,266 Scrap, tons 1,400	83,643	Sheet, lbs. 90,100 Scrap, tons 1,693	17,120	Manganese ore.
Mineral waters gallons sold	21,569,608	3,741,946	21,463,543	4,254,337	23,795,312	4,136,192	23,255,911	4,599,106	28,853,464	8,051,833	39,562,136	6,948,030	47,558,784	6,245,172	55,771,196	7,586,962	64,859,451	8,793,761	51,242,757	9,041,078	Mica.
Monazite pounds	546,855	36,193	1,573,000	137,150	30,000	1,500	44,000	1,980	250,776	13,542	330,000	20,000	908,000	48,805	748,736	59,262	802,000	64,160	862,000	64,630	Mineral waters.
Zircon do.																			3,000	570	Monazite.
Precious stones		133,250		113,621		97,850		130,675		160,920		185,770		233,170		389,050		328,450		321,400	Zircon.
Pumice stone short tons							158		500	13,200	400	10,000	(none.)	(none.)	(none.)	(none.)	700	2,750	985	2,665	Precious stones.
Rutile pounds	150	450	100	350	100	350	100	350	140	700	230	1,020	300	1,300	44,250	5,752					Pumice stone.
Talc and soapstone short tons	23,144	231,325	21,495	266,495	22,183	354,065	21,923	365,629	22,231	287,112	24,765	330,805	27,943	383,541	28,643	424,864	26,854	525,157	26,671	418,460	Rutile.
Uranium and vanadium do.																	3,810	48,125	19	5,625	Talc and soapstone.
Total value of nonmetallic mineral products		$307,314,783		$336,172,239		$333,954,110		$327,684,375		$353,848,520		$445,428,451		$512,252,767		$567,286,038		$617,251,154		$794,403,561	Uranium and vanadium.
Total value of metallic products		218,392,494		281,479,931		287,860,155		302,531,147		343,748,268		525,779,557		550,425,286		518,266,253		642,258,584		624,318,008	Nonmetallic.
Estimated value of mineral products unspecified (*w*)		1,000,000		1,000,000		1,000,000		1,000,000		1,000,000		1,000,000		1,000,000		2,000,000		1,000,000		1,000,000	Metallic.
Grand Total		$527,707,279		$620,652,170		$622,814,265		$631,215,522		$698,596,788		$972,208,008		1,063,678,053		1,086,552,291		1,260,509,738		1,419,721,569	Unspecified.
																					Total.

a. By "spot" value is meant value at the point of production.
b. Long tons are tons of 2,240 avoirdupois pounds; short tons are tons of 2,000 avoirdupois pounds.
c. Production of iron ore. 1894: 11,679,379 long tons; value at mines: $16,077,223. 1895: 15,595,[illegible] long tons; value at mines: $16,338,084. 1896: 16,916,443 long tons; value at mines: $22,788,993. 1897: 17,514,000 long tons; value at mines: $24,[illegible]. 1898: 19,455,716 long tons; value at mines: $32,180,587. 1899: 24,594,177 long tons; value at mines: $34,994,977. 1900: 27,954,181 long tons; value at mines: $40,[illegible]. 1901: 28,887,479 long tons; value at mines: $40,220,183. 1902: 35,333,135 long tons; value at mines: $60,452,000. 1903: 35,624,[illegible] long tons; value at mines: $60,[illegible].
d. Figures of production furnished by the Bureau of the Mint, Treasury Department. Coining value, $1.2929 per troy ounce. Commercial value 1895: $16,440,000. 1896: $16,004,000. 1897: $16,134,000. 1898: $21,400,[illegible]. 1899: $20,[illegible]. 1900: $20,[illegible]. 1901: $20,[illegible]. 1902: $16,[illegible]. 1903: $20,[illegible].
e. Figures of production furnished by the Bureau of the Mint, Treasury Department. Coining value, $20.6718 per troy ounce.
f. Including copper made from imported pyrites.
g. Included under pyrite in 1894, 1900, and 1902.
h. The product from domestic ores only.
i. Of 70% avoirdupois pounds net.
j. Includes antimony smelted from imported ores and antimony contained in hard lead.
k. Including nickel in copper-nickel alloy, and in exported ores and matte.
l. No metallic tin; about 20 short tons of high-grade concentrates shipped to England from South Carolina.
m. Not including $9,000 worth of platinum reported as contained in ingots from copper ore from the Rambler mine, Wyoming.
n. Including brown coal and lignite, and anthracite mined elsewhere than in Pennsylvania. Ohio, 1897: 32,007,720 short tons; value at mines $6,320,527. 1903: 37,262,360 short tons; value at mines: $66,410,823.
o. Of 4 gallons.
p. Of 300 pounds for natural cement, and 400 pounds for artificial Portland.
q. Not including limestone for iron flux, or grindstones.
r. Of 280 pounds net. Value does not include exclusive of cost of packages.
s. Not including value of 85,000 pounds of cobalt ore contained in Idaho.
t. Including metallic paints, barytes, umber, sienna, vermilion red, siennas, ground soapstone, ground slate, and mineral black.
u. Value of clay products in 1894, $964,852,585; 1895: $62,439,306; 1896: $62,110,630; 1897: $66,358,991; 1898: $74,487,880; 1899: Census returns: $66,797,270; 1900: $90,333,365; 1901: $[illegible]; 1902: $125,180,331; 1903: $130,963,668.
v. Not reported.
w. Including building, engine, furnace, and other mails, iron ore used as flux in lead smelting, nitrate of soda, carbonate of soda, sulphate of soda, molybdenum, tungsten, and other rarer metals used by paper manufacturers.

TOTAL VALUE OF THE MINERAL PRODUCTS SINCE 1880.

	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	
Metallic products	$190,039,862	$192,892,408	$219,755,109	$203,128,859	$196,109,589	$181,586,587	$214,897,825	$248,925,054	$258,781,822	$287,587,033	$305,872,422	$300,403,748	$307,936,189	$250,397,606	$218,392,494	$281,479,931	$287,860,155	$302,531,147	$343,748,268	$525,779,557	$550,425,286	$518,266,253	$642,258,584	$624,318,008	Metallic products.
Nonmetallic products	173,279,135	206,782,144	221,846,150	243,852,214	270,479,506	261,322,688	230,886,760	276,940,439	246,158,114	242,689,832	232,776,586	251,767,866	239,956,825	228,257,318	307,714,785	336,172,239	333,954,110	327,684,375	353,848,520	445,428,451	512,252,767	567,286,038	617,251,154	794,403,561	Nonmetallic products.
Unspecified	6,000,000	6,500,000	6,300,000	6,500,000	5,000,000	5,000,000	800,000	800,000	900,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	Unspecified.
Total	$369,319,000	$406,175,552	$447,901,259	$453,481,073	$471,589,095	$447,908,480	$446,584,584	$526,714,474	$546,781,936	$559,276,865	$539,648,995	$552,171,594	$548,892,931	$474,654,924	$527,107,279	$620,652,170	$622,814,265	$631,215,522	$698,596,788	$972,208,008	$1,063,678,053	$1,086,552,291	$1,260,509,738	$1,419,721,569	Total.

Washington, D. C., September, 1904.
(10,000.)

COMPILED UNDER THE SUPERVISION OF DAVID T. DAY, CHIEF OF DIVISION.

CHARLES D. WALCOTT,
DIRECTOR.

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